

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

ON A COLLECTION OF FISHES FROM THE LOWER
POTOMAC, THE ENTRANCE OF CHESAPEAKE
BAY, AND FROM STREAMS FLOWING
INTO THESE WATERS.*

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SAMUEL FREDERICK HILDEBRAND.

U. S. BUREAU OF FISHERIES.

The collection upon which this paper is based is a miscellaneous one, made chiefly in behalf of the U. S. Fish Commission at various times during the years 1892 to 1900, by the U. S. Fisheries Steamer *Fish Hawk*, and by Messrs. M. C. Marsh, W. C. Kendall, W. H. Sterling, E. C. Starks, W. T. Lindsay, A. Marmaduke, E. Daws, and Capt. L. G. Harron. This material remained unstudied until recently when the present writers went over the entire lot. It was found to contain several interesting species, and enables us to record an extension of the geographic range of a number of species beyond their previously recorded limits. It is hoped that the publication of this list may prove of interest to students of the fish fauna of the region covered by the collection.

The waters and localities from which specimens have been obtained by the above named collectors are as follows:

Potomac River at Jackson City, Alexandria, and Mathias Point, Va.; Bryans Point, Somerset Beach, Riverside, Blackstone Island, Piney Point, and St. Georges Island, Md.; Mattaponi River at Milford, Va.; Blackwells Mill Creek, Cockerel Creek, Cape Charles City, Mobjack Bay, Gloucester Point, Buckroe Beach, Old Point Comfort, Hampton Roads, Hampton Creek, Ocean View, and Cape Henry, Va.

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This collection consists of a total of 1,487 specimens, all of which have been deposited in the National Museum.

1. **Notropis hudsonius** (De Witt Clinton).

SPAWN-EATER; SPOT-TAILED MINNOW; SHINER.

Four specimens, 1.5 to 2.3 inches long, from Mattapony River.

2. **Notropis hudsonius amarus** (Girard).

SHINER; SPAWN-EATER; SILVER-FIN.

Five specimens, 2.75 to 4 inches long, from Jackson City.

3. **Notropis amœnus** (Abbott).

Two specimens, 1.5 and 2.6 inches long, from Mattapony River.

Hybopsis kentuckiensis (Rafinesque).

HORNY-HEAD; RIVER CHUB.

Five specimens, 2.5 to 5 inches long, from Mattapony River.

5. **Anguilla rostrata** (Le Sueur).

AMERICAN EEL; FRESHWATER EEL.

Three specimens, 3 to 11 inches long, from Somerset Beach; two, 11 and 12 inches long, from Riverside.

6. **Pomolobus mediocris** (Mitchill).

HICKORY SHAD; FALL HERRING.

Thirty-two specimens, 1.5 to 2 inches long, from Somerset Beach; three, 2 to 2.5 inches long, from Riverside; one, 3 inches long, from St. Georges Island; twenty-eight, 3.25 to 4 inches long, from the mouth of Hampton Creek.

7. **Pomolobus pseudoharengus** (Wilson).

ALEWIFE; BRANCH HERRING.

Seven specimens, 1.75 to 2.25 inches long, from Bryans Point.

8. **Pomolobus æstivalis** (Mitchill).

GLUT HERRING; SUMMER HERRING.

Twenty-one specimens, 1.8 to 2.25 inches long, from Riverside; one, 1.5 inches long, from Blackstone Island; eighteen, 2 to 2.2 inches long, from St. Georges Island; fifty-six, 1.4 to 1.6 inches long, from Cockerel Creek; three, 1.5 to 2.4 inches long, from Buckroe Beach; eighty-four, 2.4 to 3 inches long, from the mouth of Hampton Creek.

9. **Alosa sapidissima** (Wilson).

COMMON SHAD; AMERICAN SHAD; POTOMAC SHAD.

Forty-six specimens, 1 to 1.5 inches long, from Jackson City; forty-eight, 1 to 3 inches long, from Bryans Point; five, of equal size, 2 inches long, from Somerset Beach; one 3.3 inches long, from Gloucester Point; five, 2 to 4 inches long, from the mouth of Hampton Creek.

10. **Brevoortia tyrannus** (Latrobe).

MENHADEN; "BUGFISH"; "ALEWIFE."

Six specimens, of equal size, about 2.75 inches long, from Somerset

Beach; three, 4 to 5.5 inches long, from St. Georges Island; eight, 3 to 6 inches long, from Blackwells Mill Creek; seven, from Cockerel Creek; fifty-nine, 2 to 3.5 inches long, from Mobjack Bay; four, 6 to 9 inches long, from Old Point Comfort; three, 2.75 to 4.25 inches long, from the mouth of Hampton Creek.

11. **Stolephorus mitchilli** (Cuvier & Valenciennes).

ANCHOVY.

Thirty-seven specimens, 1.5 to 2.5 inches long, from Somerset Beach; ten, 1.3 to 1.6 inches long, from Riverside.

12. **Synodus fœtens** (Linnaeus).

LIZARD-FISH.

Four specimens, 4.5 to 5.5 inches long, from St. Georges Island; one, 2.7 inches long, from Cape Charles City.

13. **Esox reticulatus** Le Sueur.

COMMON EASTERN PICKEREL.

Two specimens, 4 and 4.5 inches long, from Mattapony River.

14. **Fundulus majalis** (Walbaum).

KILLIFISH; MAYFISH.

One specimen, 4 inches long, from Mathias Point; four, of equal size, 2 inches long, from Riverside; five, 3 to 5 inches long, from Blackstone Island; two, 3 and 5 inches long, from Piney Point; thirty-eight, 1.75 to 5.5 inches long, from St. Georges Island; one, 4 inches long, from Cape Charles City; five, 1.2 to 2.25 inches long, from the mouth of Hampton Creek.

15. **Fundulus heteroclitus** (Linnaeus).

COMMON KILLIFISH; MUD MINNOW.

Ninety-three specimens, 2 to 3 inches long, from Somerset Beach; twenty-six, 1 to 2 inches long, from St. Georges Island; one, 3 inches long, from Cape Charles City; one, 1.4 inches long, from the mouth of Hampton Creek.

16. **Fundulus diaphanus** (Le Sueur).

Eleven specimens, 1.5 to 2.5 inches long, from Somerset Beach; five, 1.5 to 3 inches long, from Blackstone Island; five, 2 to 3 inches long, from St. Georges Island.

17. **Lucania parva** (Baird & Girard).

RAINWATER-FISH.

Fifty-four specimens, .75 to 1.3 inches long, from St. Georges Island; three, .75 to 1.25 inches long, from Cape Charles City.

18. **Cyprinodon variegatus** Lacépède.

SHEEPSHEAD MINNOW.

Ninety-one specimens, .75 to 1.75 inches long, from St. Georges Island.

19. **Gambusia affinis** (Baird & Girard).

TOP MINNOW.

Ninety-one specimens, .75 to 1.25 inches long, from St. Georges Island. The lot is composed of 14 males and 77 females.

20. **Tylosurus marinus** (Walbaum).

GARFISH; BILLFISH; NEEDLE-FISH.

One specimen, 4.75 inches long, from Bryans Point.

21. **Apeltes quadracus** (Mitchill).

One specimen, 1.2 inches long, from St. Georges Island. Previously not recorded south of New Jersey.

22. **Siphostoma floridæ** Jordan & Gilbert.

Two specimens, 5.25 and 5.5 inches long, from Cape Charles City; three, 3.25 to 6.5 inches long, from mouth of Hampton Creek. Previously not recorded north of Beaufort, N. C.

23. **Siphostoma fuscum** (Storer).

COMMON PIPEFISH.

Two specimens, 4.5 and 6 inches long, from Riverside; one, 5.75 inches long from mouth of Hampton Creek.

24. **Hippocampus hudsonius** De Kay.

COMMON AMERICAN SEA-HORSE.

Two young, about 7 inches long, from Cape Charles City.

25. **Kirtlandia laciniata** (Swain).

SILVER-FISH.

One specimen, 3.2 inches long, from Cape Charles City.

26. **Menidia gracilis** (Günther).

Four specimens, 1.75 to 2.1 inches long, from Hampton Creek.

27. **Menidia gracilis beryllina** (Cope).

Six specimens, 2 to 2.5 inches long, from Alexandria; eight, of about the same size, 2.25 inches long, from Bryans Point; five, 1.5 to 1.75 inches long, from Blackstone Island; fifty, 1 to 1.25 inches long, from St. Georges Island.

28. **Menidia notata** (Mitchill).

SILVERSIDE.

One specimen, 3 inches long, from Riverside; thirty-six, 2 to 4 inches long, from Blackstone Island; one, 2.75 inches long, from St. Georges Island; twenty-one, 2 to 3.75 inches long, from Cape Charles City; four, 3 to 3.75 inches long, from mouth of Hampton Creek.

29. **Querimana gyrans** Jordan & Gilbert.

WHIRLIGIG MULLET.

Three specimens, each about one inch long, from Hampton Creek.

30. **Sphyræna borealis** De Kay.

NORTHERN BARRACUDA.

Two specimens, 1 to 3 inches long, from Cape Charles City.

31. **Trachinotus falcatus** (Linnaeus).

ROUND POMPAÑO; PALOMETA.

One specimen, 2.5 inches long, from near Ocean View.

32. **Enneacanthus gloriosus** (Holbrook).

Seven specimens, each about 1.9 inches long, from Somerset Beach. One specimen abnormal, D. X, 10; A. IV, 9.

33. **Lepomis auritus** (Linnaeus).

YELLOWBELLY; REDBREAST BREAM.

One specimen, 2.25 inches long, from Somerset Beach.

34. **Eupomotis gibbosus** (Linnaeus).

PUMPKIN-SEED.

Fourteen specimens, 1 to 3 inches long, from Somerset Beach.

35. **Micropterus salmoides** (Lacépède).

LARGE-MOUTHED BLACK BASS.

One specimen, 2.5 inches long, from Mattapony River. Introduced species.

36. **Boleosoma nigrum olmstedii** (Storer).

TESSELATED DARTER.

Two specimens, 1.25 and 1.5 inches long, from Mattapony River.

37. **Roccus lineatus** (Bloch).

STRIPED BASS; ROCKFISH; ROCK.

Eleven specimens, 3.25 to 4.75 inches long, from Hampton Creek.

38. **Morone americana** (Gmelin).

WHITE PERCH.

Twenty-two specimens, 1.5 to 3.25 inches long, from Somerset Beach.

39. **Mycteroperca microlepis** (Goode & Bean).

GAG.

One specimen, 5.5 inches long, from Old Point Comfort. Previously not recorded north of Beaufort, N. C.

40. **Centropristes striatus** (Linnaeus).

BLACK SEA BASS; BLACKFISH.

Three specimens, each 2 inches long, from Cape Charles City; six, each 2 inches long, from Cape Henry.

41. **Neomænis griseus** (Linnaeus).

GRAY SNAPPER.

Five specimens, 2.25 to 3 inches long, from Old Point Comfort; one, 2.6 inches long, from Ocean View.

42. **Orthopristis chrysopterus** (Linnaeus).

PIGFISH; SAILORS CHOICE; HOGFISH.

Thirty-four specimens, 1 to 3 inches long, from Cape Charles City.

43. **Eucinostomus gula** (Cuvier & Valenciennes).

MOJARRA DE LEY.

Sixty-nine specimens, .75 to 2 inches long, from Cape Charles City.

44. **Cynoscion nebulosus** (Cuvier & Valenciennes).

SPOTTED WEAKFISH; SPOTTED SEA TROUT.

One specimen, 3.75 inches long, from St. Georges Island; three, 2 to 2.5 inches long, from Old Point Comfort.

45. **Bairdiella chrysur**a (Lacépède).

MADemoisELLE; YELLOW-TAIL.

One specimen, 3.25 inches long, from St. Georges Island; thirty-eight, .9 to 3 inches long, from Cape Charles City.

46. **Sciaenops ocellatus** (Linnaeus).

RED DRUM; CHANNEL BASS; REDFISH.

Eight very small specimens, each about .7 inches long, from Gloucester Point.

47. **Leiostomus xanthurus** Lacépède.

SPOT; GOODY.

Six specimens, 2.5 to 3.25 inches long, from Somerset Beach; twenty-two, each about 2 inches long, from Cockerel Creek; eleven, 3.25 to 4.75 inches long, from Hampton Creek; six, each 2 inches long, from Cape Henry.

48. **Micropogon undulatus** (Linnaeus).

CROAKER.

Eighteen specimens, 1.5 to 2.5 inches long, from Hampton Creek; two, 1.25 and 2 inches long, from Cape Charles City.

49. **Menticirrhus americanus** (Linnaeus).

SAND WHITING; CAROLINA WHITING.

Fourteen specimens, 1 to 2.5 inches long, from St. Georges Island; one, 3.25 inches long, from near Ocean View.

50. **Tautoga onitis** (Linnaeus).

TAUTOG; BLACKFISH; OYSTER-FISH.

Three specimens, 2.1 to 3.25 inches long, from Cape Charles City; one, 2.75 inches long, from Old Point Comfort.

51. **Chaetodipterus faber** (Broussonet).

ANGEL-FISH; SPADE-FISH.

Two specimens, each 2 inches long, from Hampton Roads; two, 2 and 2.1 inches long, from near Ocean View.

52. **Monocanthus hispidus** (Linnaeus).

FOOL-FISH; FILE-FISH; LEATHER-FISH.

Three specimens, 1.1 to 1.75 inches long, from Cape Charles City; four, 1.75 to 2.75 inches long, from near Ocean View.

53. **Spheroides maculatus** (Bloch & Schneider).

One small specimen, 1 inch long, from St. Georges Island; one, 3 inches long, from Cape Charles City.

54. **Chilomycterus schæpfi** (Walbaum).

COMMON BURRFISH; SWELL TOAD.

One small specimen, 1.25 inches long, from Cape Charles City.

55. **Hemitripteris americanus** (Gmelin).

SEA-RAVEN.

Two specimens, 2.6 and 2.9 inches long, from Cape Charles City; one, 5 inches long, from Old Point Comfort.

56. **Microgobius eulepis** Eigenmann & Eigenmann.

Two specimens, each 1.25 inches long, from mouth of Hampton Creek.

A rare species, previously recorded only from Fortress Monroe (the type locality), Beaufort Harbor and from Uncle Israel Shoal, near Beaufort, N. C.

57. **Gobiosoma bosci** (Lacépède).

CLINGING GOBY.

One specimen, 1.5 inches long, from Blackstone Island; one, 1.5 inches long, from Cape Charles City; one, 1.75 inches long, from Gloucester Point; one, 1.75 inches long, from Hampton Creek.

58. **Astroscopus guttatus** Abbott.

One specimen, 2.75 inches long, from Gloucester Point.

59. **Opsanus tau** (Linnaeus).

TOADFISH.

Three small specimens, 1.25 to 1.5 inches long, from Cape Charles City.

60. **Hypsoblennius hertz** (Le Sueur).

One specimen, 3.25 inches long, from Old Point Comfort; two, each 2 inches long, from near Ocean View. Previously not recorded north of North Carolina.

61. **Chasmodes bosquianus** (Lacépède).

One specimen, 2 inches long, from Blackstone Island.

62. **Prionotus carolinus** (Linnaeus).

COMMON GURNARD; SEA-ROBIN.

One specimen, 3 inches long, from Old Point Comfort; six, 2.5 to 3 inches long, from Hampton Roads; six, 1.5 to 3.5 inches long, from near Ocean View; six, 1.25 to 2.25 inches long, off Cape Henry.

63. **Gobiesox strumosus** Cope.

One specimen, 1.25 inches long, from St. Georges Island; one, 2 inches long, from Gloucester Point.

Head 2.5; D. 10; A. 8.

Not previously recorded north of South Carolina.

64. **Urophycis chuss** (Walbaum).

Four specimens, 4.25 to 6.5 inches long, off Cape Henry.

65. **Paralichthys dentatus** (Linnaeus).

SUMMER FLOUNDER.

One specimen, 5.5 inches long, from St. Georges Island; two, 1.75 inches long, from Hampton Creek.

66. **Achirus fasciatus** Lacépède.

AMERICAN SOLE; HOG-CHOKER.

Three specimens, each 1.5 inches long, from St. Georges Island.